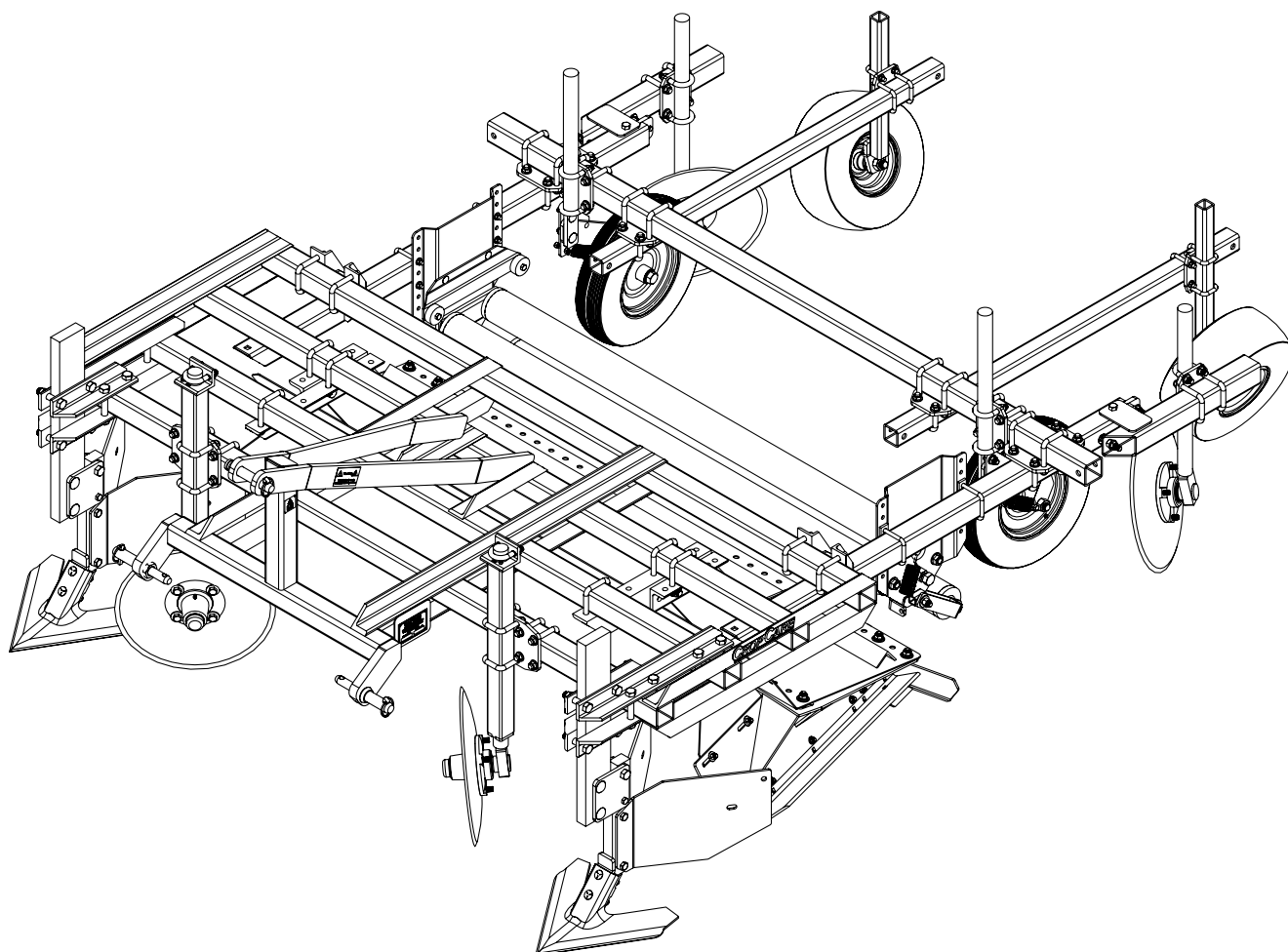


## Parts Breakdown

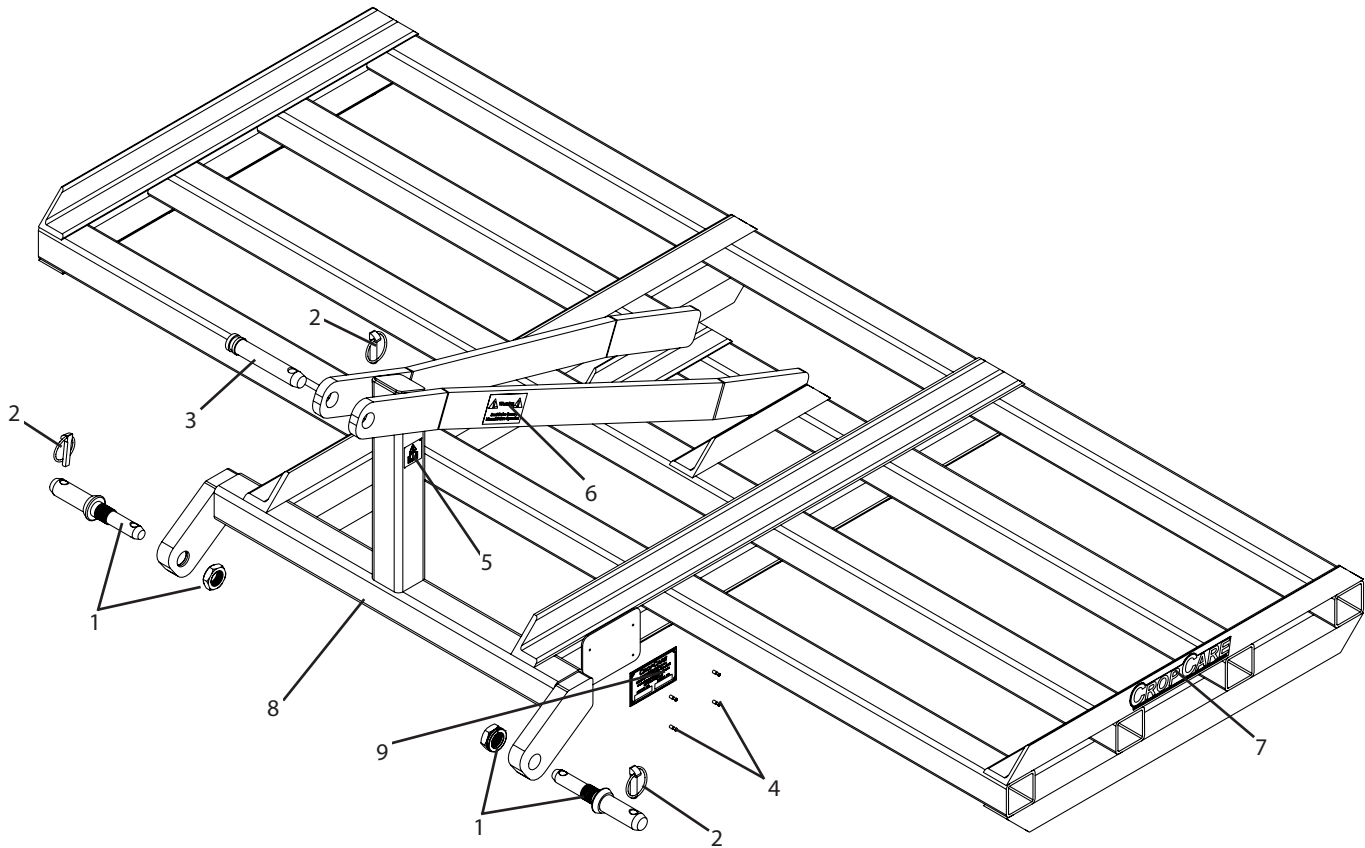
### Bed Shaper, Plastic Mulch Layer Model: ML4600



Manufactured by PBZ LLC  
A Paul B Zimmerman Inc. Company  
[www.CropCareEquipment.com](http://www.CropCareEquipment.com)

# ML4600 Parts Breakdown

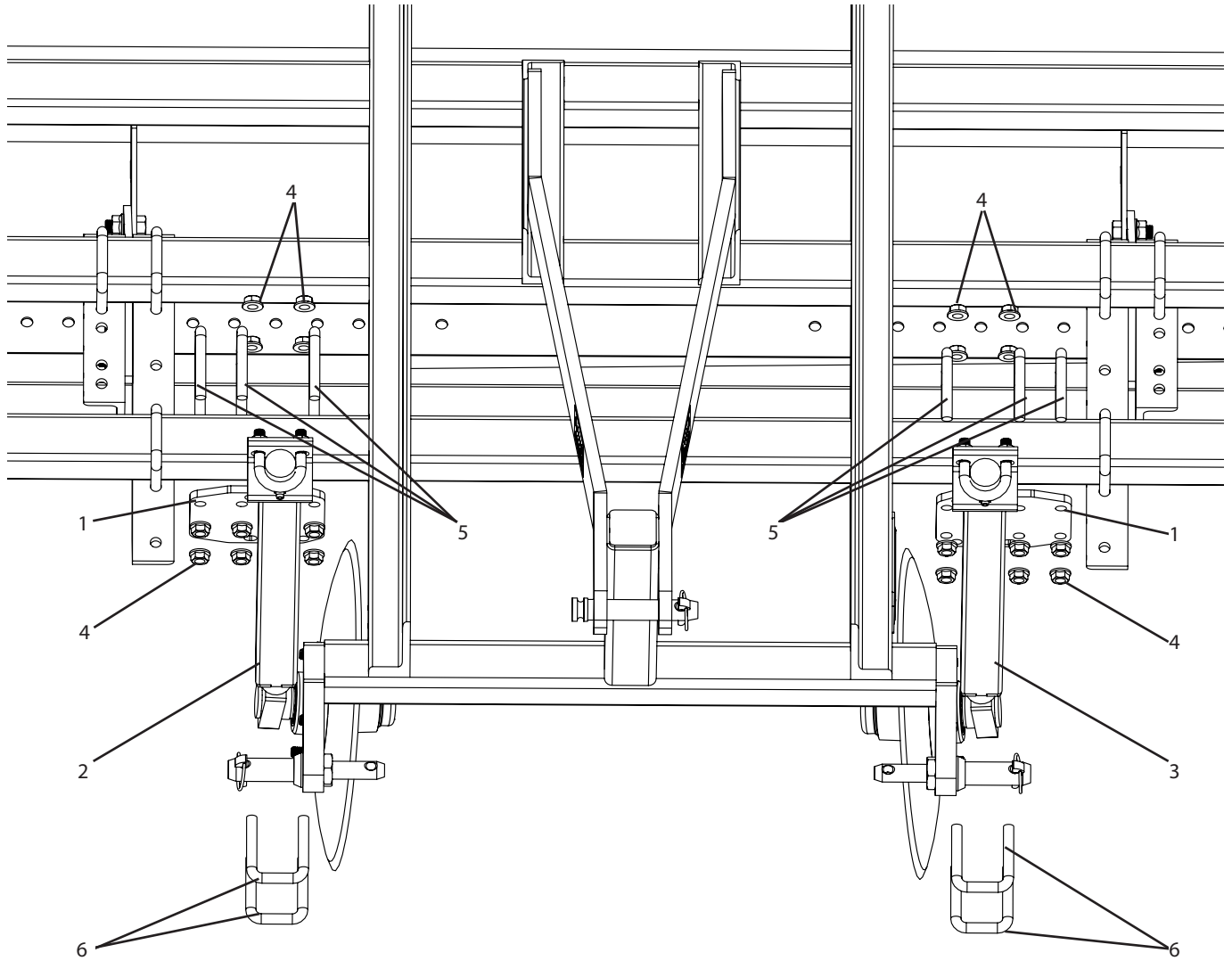
## Toolbar Frame



Ref #	Qty.	Part Number	Description
1	2	00213	Pin, Lift Arm Cat 1 & 2 Forged
2	3	02703	Pin, Linch 7/16" Cat 1 & 2
3	1	03011	Pin, Top Link Cat 2 (4-5/16" Usable)
4	4	BTT44	Rivet, Pop 1/8" Dia. x .188" x .250" Grip SS
5	2	DE115	Decal, Read Owners Manual
6	2	DE39	Decal, "Warning Read Owner's Manual
7	2	DE46	Decal, CropCare Logo 1.9" x 8.8"
8	1	RBL101	Raised Bed Layer, Tool Bar Frame
9	1	SP500	Plate, Serial Number, CropCare

# ML4600 Parts Breakdown

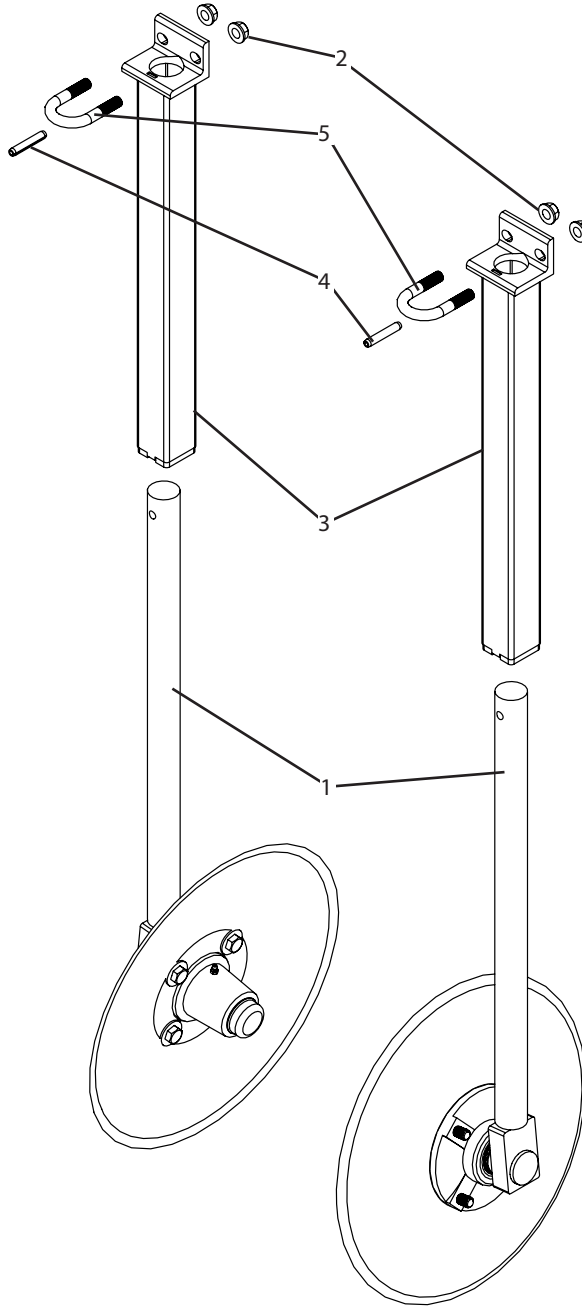
## Shaping Disks



Ref #	Qty.	Part Number	Description
1	2	RBL108	Bed Shaper, Disk Post Mount Plate
2	1	RBL109A	Bed Shaper, Front Disk Assembly, Side A
3	1	RBL109B	Bed Shaper, Front Disk Assembly, Side B
4	20	FN12	Nut, Flange 1/2-13
5	6	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc
6	4	UBSQ08X02X03	U-bolt, Square, 1/2-13 x 2" ID width x 3" ID length, zinc

# ML4600 Parts Breakdown

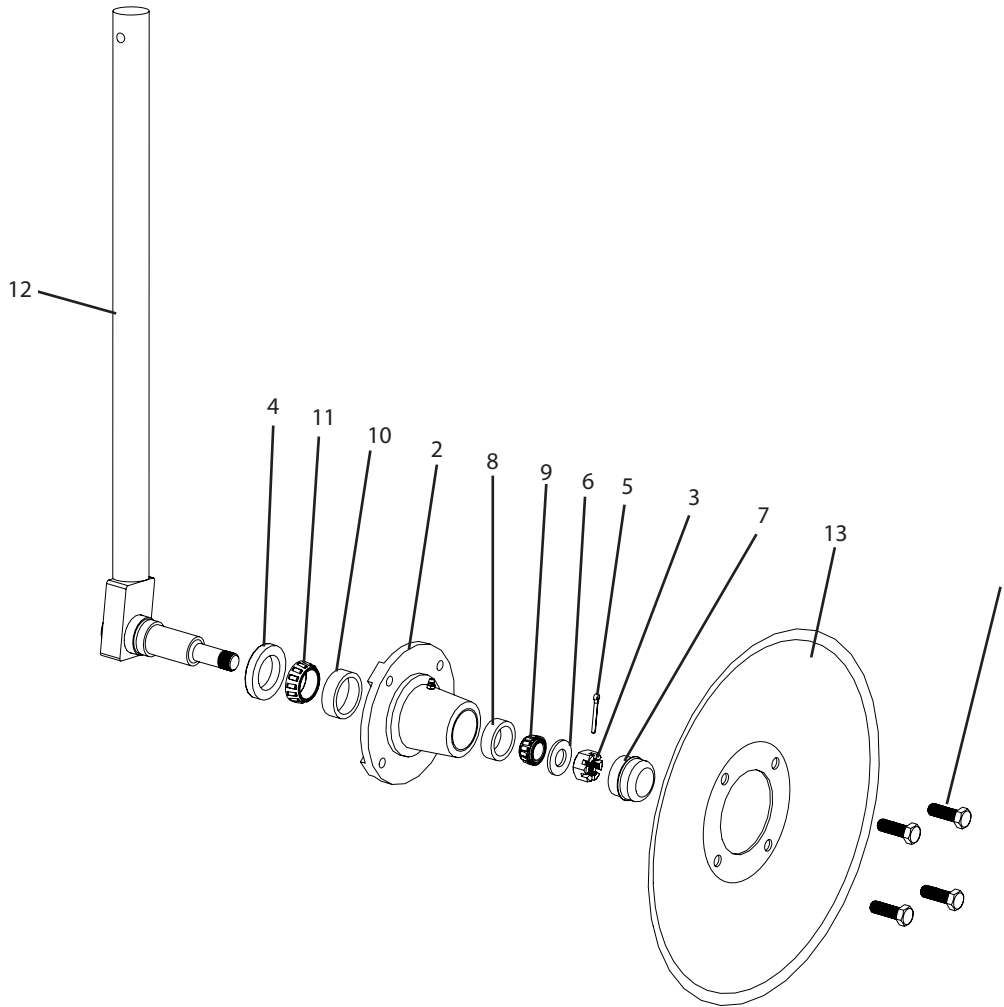
## Shaping Disks (RBL109A & RBL109B)



Ref #	Qty.	Part Number	Description
1	2	-----	Shaping Disk Inner Shank
2	4	FN12	Nut, Flange 1/2-13
3	2	RBL110	Bed Shaper, Outer Disk Shank
4	2	RP38X2	Roll Pin, 3/8" x 2"
5	2	UBR08X0108X0212	U-bolt, 1/2-13 x 1 1/2" ID width x 2 3/4" length, Zinc

# ML4600 Parts Breakdown

## Shaping Disks (RBL109A & RBL109B, Inner Shank)

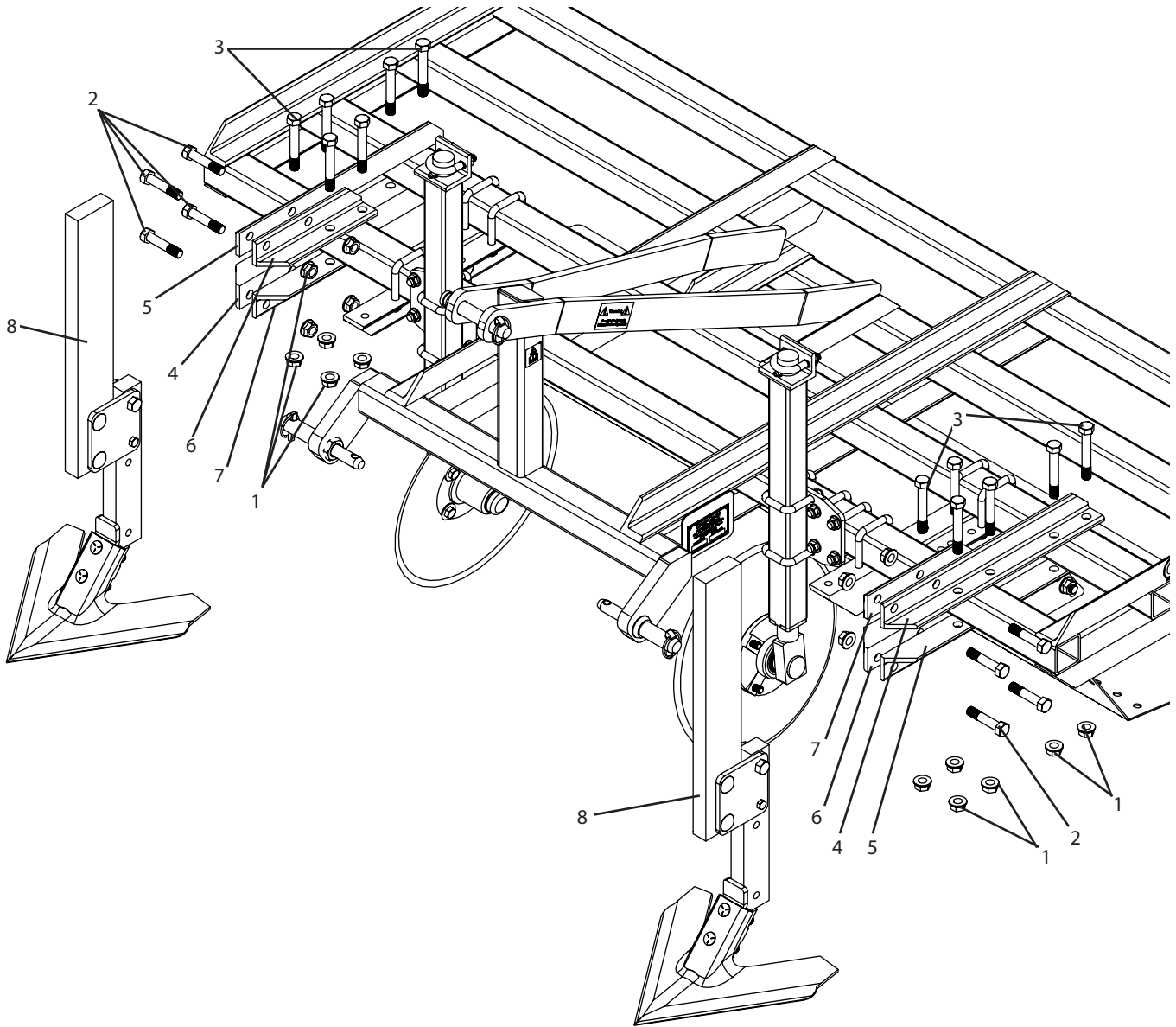


Ref #	Qty.	Part Number	Description
1	4	H5F12*112	* Bolt, Hex 1/2-20 x 1-1/2" Gr 5
2	1	RBL162	Hub Assembly, 4 Bolt On 5in Circle (3.625 Hub Pilot)
3	1	CNF34	* Slotted Nut, 3/4"-16, Zinc
4	1	CR14975	* Seal
5	1	CT532X114	* Cotter Pin, 5/32" x 1 1/4"
6	1	SW34	* Washer, Flat 3/4" SAE
7	1	RBL163	* Hub Cap
8	1	LM11910	* Bearing Cup, Outer
9	1	LM11949	* Outer Cone Bearing,1500 lbs Hub
10	1	LM67010	* Bearing Cup, Inner
11	1	LM67048	* Inner Cone Bearing,1500 lbs Hub
12	1	RBL111	Bed Shaper, Rotating Inner Shank
13	1	RBL154	Disc Blade, Smooth, Concavity, 16in, (4) 1/2" bolts, 5in dia, 3 11/16" pilot

\* Components of RBL162.

# ML4600 Parts Breakdown

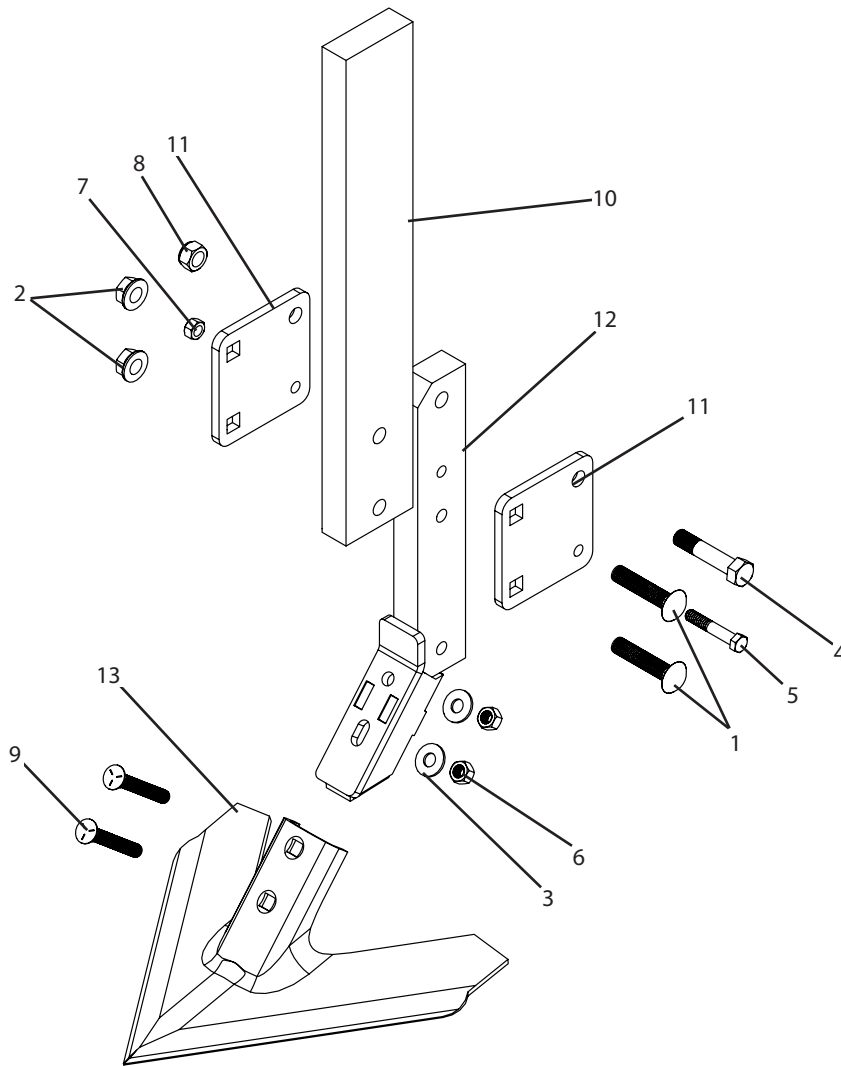
## Furrow Shanks



Ref #	Qty.	Part Number	Description
1	20	FN58	Nut, Flange 5/8-11
2	8	H5C58*3	Bolt, Hex 5/8-11 x 3" Gr 5
3	12	H5C58*4	Bolt, Hex 5/8-11 x 4" Gr 5
4	2	RBL102A	Bed Shaper, Shank Quarter Bracket, Side A
5	2	RBL102B	Bed Shaper, Shank Quarter Bracket, Side B
6	2	RBL103A	Bed Shaper, Shank Quarter Bracket, Single Bar, Side A
7	2	RBL103B	Bed Shaper, Shank Quarter Bracket, Single Bar, Side B
8	2	RBL158	Bed Shaper, Furrow Shank Assembly

# ML4600 Parts Breakdown

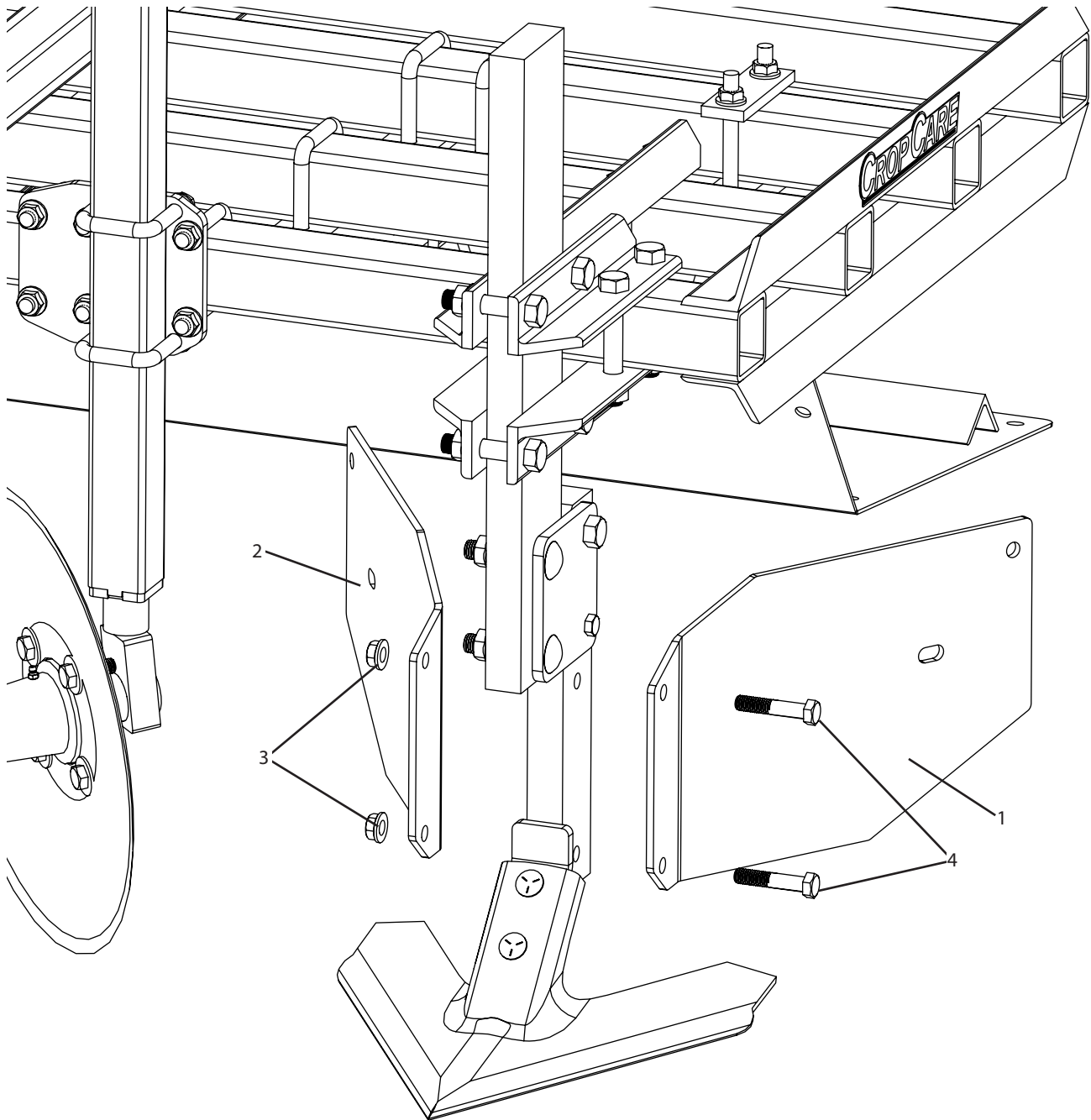
## Furrow Shanks (RBL158)



Ref #	Qty.	Part Number	Description
1	2	CB58*3G5	Bolt, Carriage 5/8-11 x 3" Gr 5
2	2	FN58	Nut, Flange 5/8-11
3	2	FW12	Washer, Flat 1/2" USS
4	1	H5C58*3	Bolt, Hex 5/8-11 x 3" Gr 5
5	1	H8C716*212	Bolt, Hex 7/16-14 x 2-1/2" Gr 8
6	2	NC12	Nut, Hex 1/2-13
7	1	NC716	Nut, Hex 7/16-14
8	1	NNC58	Nut, Lock Nylon 5/8-11
9	2	PB12X312	Plow Bolt 1/2-13x 3 1/2" Grade 5, Zinc
10	1	RBL104	Bed Shaper, Shank Top
11	2	RBL105	Bed Shaper, Shear Bolt Plate
12	1	RBL106	Bed Shaper, Furrow Shank Bottom
13	1	SWCP145	Chisel Plow, 14" Sweep

# ML4600 Parts Breakdown

## Furrow Wings

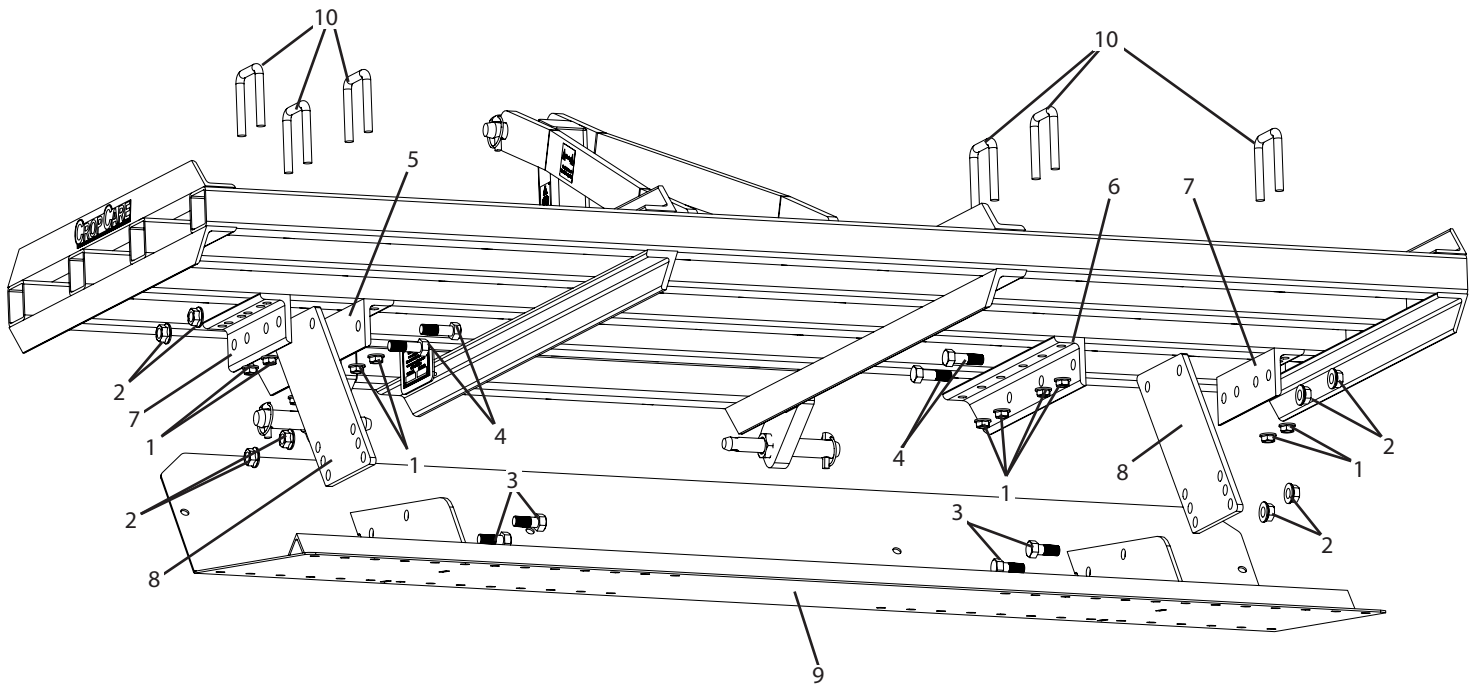


Ref#	Qty.	Part #	Description
1	2	RBL107A	Bed Shaper, Furrow Wing, Left
2	2	RBL107B	Bed Shaper, Furrow Wing, Right
3	4	FN12	Nut, Flange 1/2-13
4	4	H5C12*212	Bolt, Hex 1/2-13 x 2-1/2" Gr 5



# ML4600 Parts Breakdown

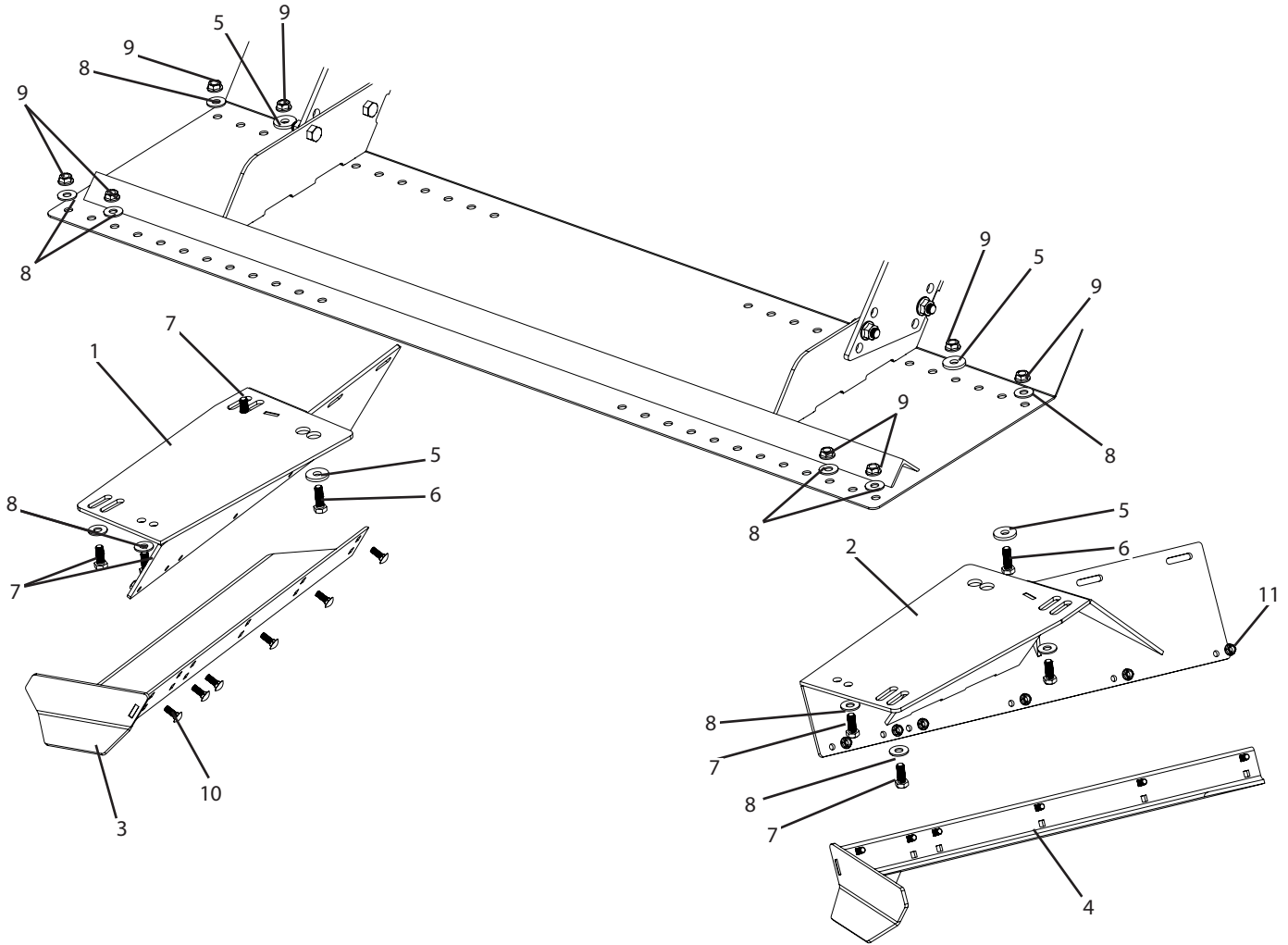
## Bed Shaper Pan



Ref #	Qty.	Part Number	Description
1	12	FN12	Nut, Flange 1/2-13
2	8	FN58	Nut, Flange 5/8-11
3	4	H5C58*112	Bolt, Hex 5/8-11 x 1 1/2" Gr 5
4	4	H5C58*2	Bolt, Hex 5/8-11 x 2" Gr 5
5	1	RBL112A	Bed Shaper, Mounting Bracket, Side A
6	1	RBL112B	Bed Shaper, Mounting Bracket, Side B
7	2	RBL113	Bed Shaper, Mounting Bracket
8	2	RBL114	Bed Shaper, Pan Leg
9	1	RBL115	Bed Shaper, Pan, 72in Width
10	6	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc

# ML4600 Parts Breakdown

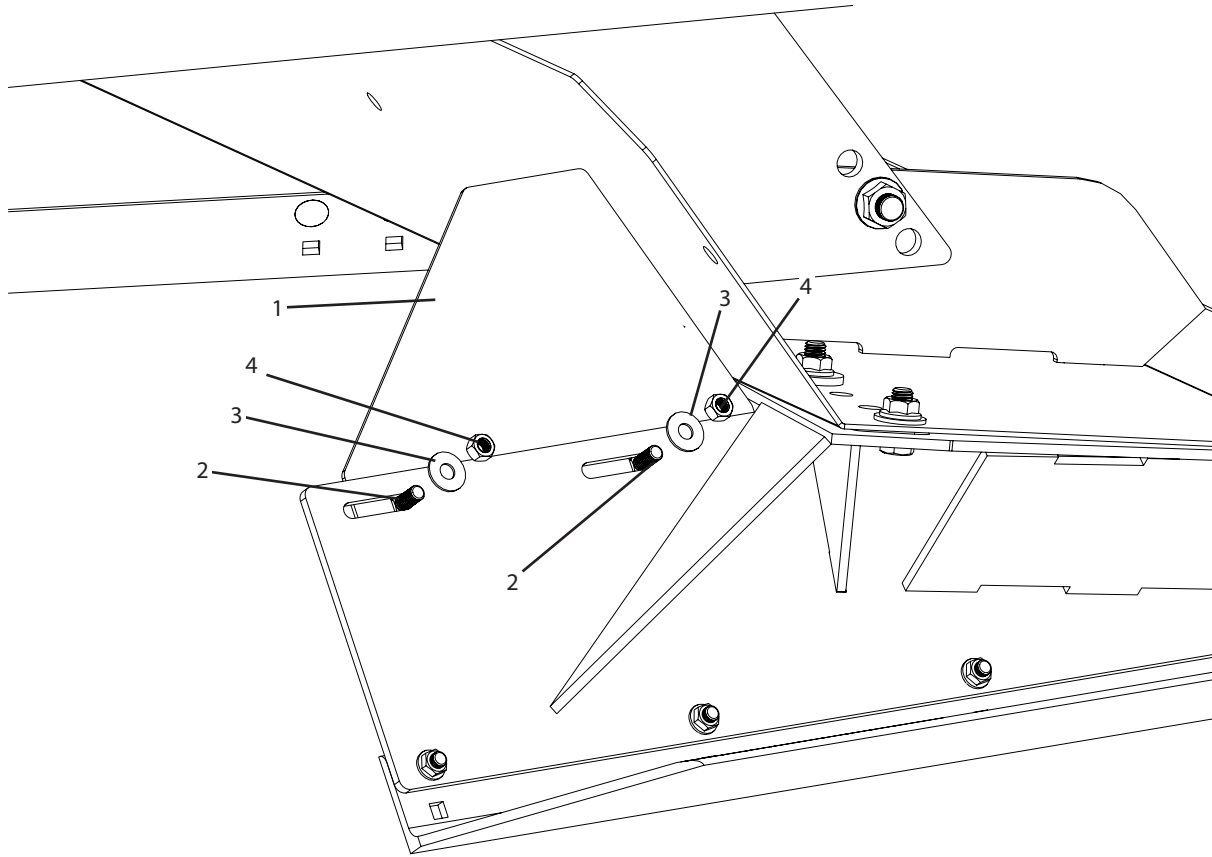
## Bed Height & Furrow Shoes



Ref#	Qty.	Part #	Description
1	1	RBL117A	Furrow Shaper, 3-4in Bed Height, Side A
2	1	RBL117B	Furrow Shaper, 3-4in Bed Height, Side B
1	1	RBL117C	Furrow Shaper, 5-6in Bed Height, Side A
2	1	RBL117D	Furrow Shaper, 5-6in Bed Height, Side B
1	1	RBL117E	Furrow Shaper, 7-8in Bed Height, Side A
2	1	RBL117F	Furrow Shaper, 7-8in Bed Height, Side B
1	1	RBL117G	Furrow Shaper, 9-10in Bed Height, Side A
2	1	RBL117H	Furrow Shaper, 9-10in Bed Height, Side B
3	1	RBL118A	Bed Shaper, Furrow Shoe, Side A
4	1	RBL118B	Bed Shaper, Furrow Shoe, Side B
5	4	RBL119	Bed Shaper, Washer
6	2	H5C12*112	Bolt, Hex 1/2-13 x 1-1/2" Gr 5
7	6	H5C12*114	Bolt, Hex 1/2-13 x 1-1/4" Gr 5
8	12	FW12	Washer, Flat 1/2" USS
9	16	FN12	Nut, Flange 1/2-13
10	12	CB38*1G5	Bolt, Carriage 3/8-16 x 1" Gr 5
11	13	FN38	Nut, Flange 3/8-16

# ML4600 Parts Breakdown

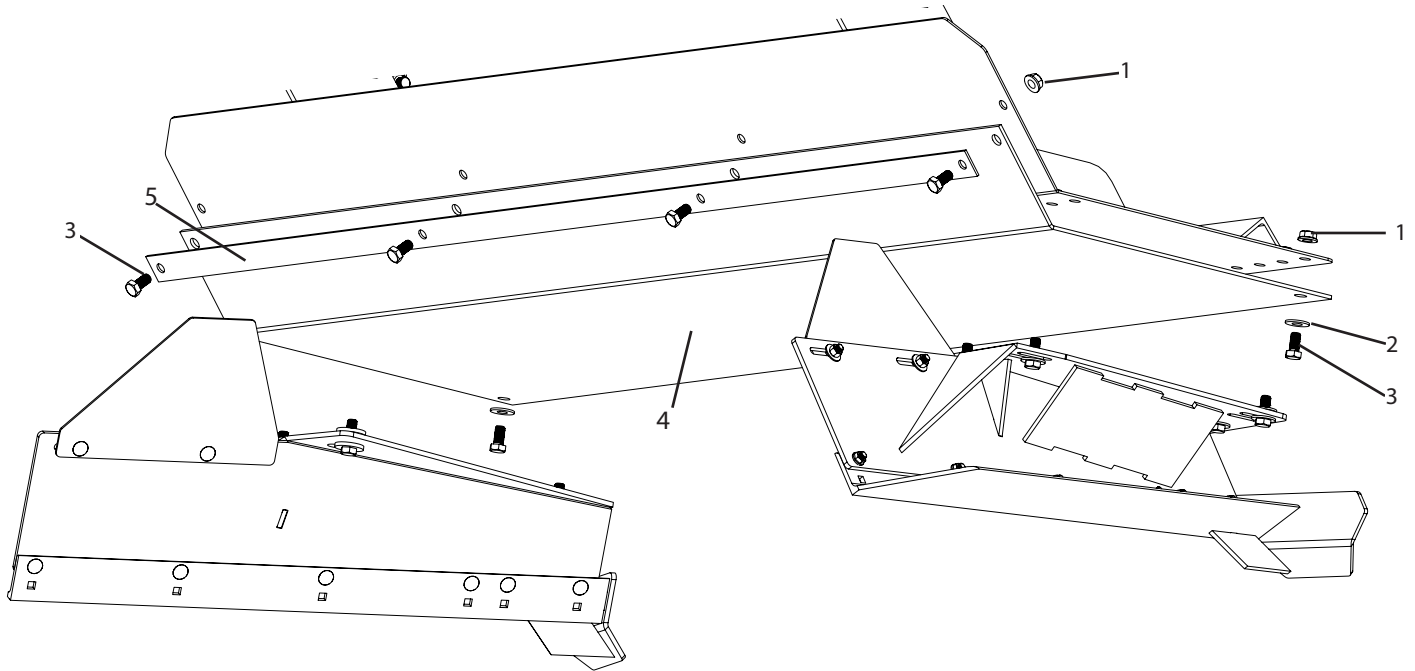
## Bed Shaper, Side Shields



Ref#	Qty.	Part #	Description
1	2	RBL116	Bed Shaper, Adjustable Side Shield
2	4	CB38*1G5	Bolt, Carriage 3/8-16 x 1" Gr 5
3	4	FW38	Washer, Flat 3/8"
4	4	NC38	Nut, Hex 3/8-16

# ML4600 Parts Breakdown

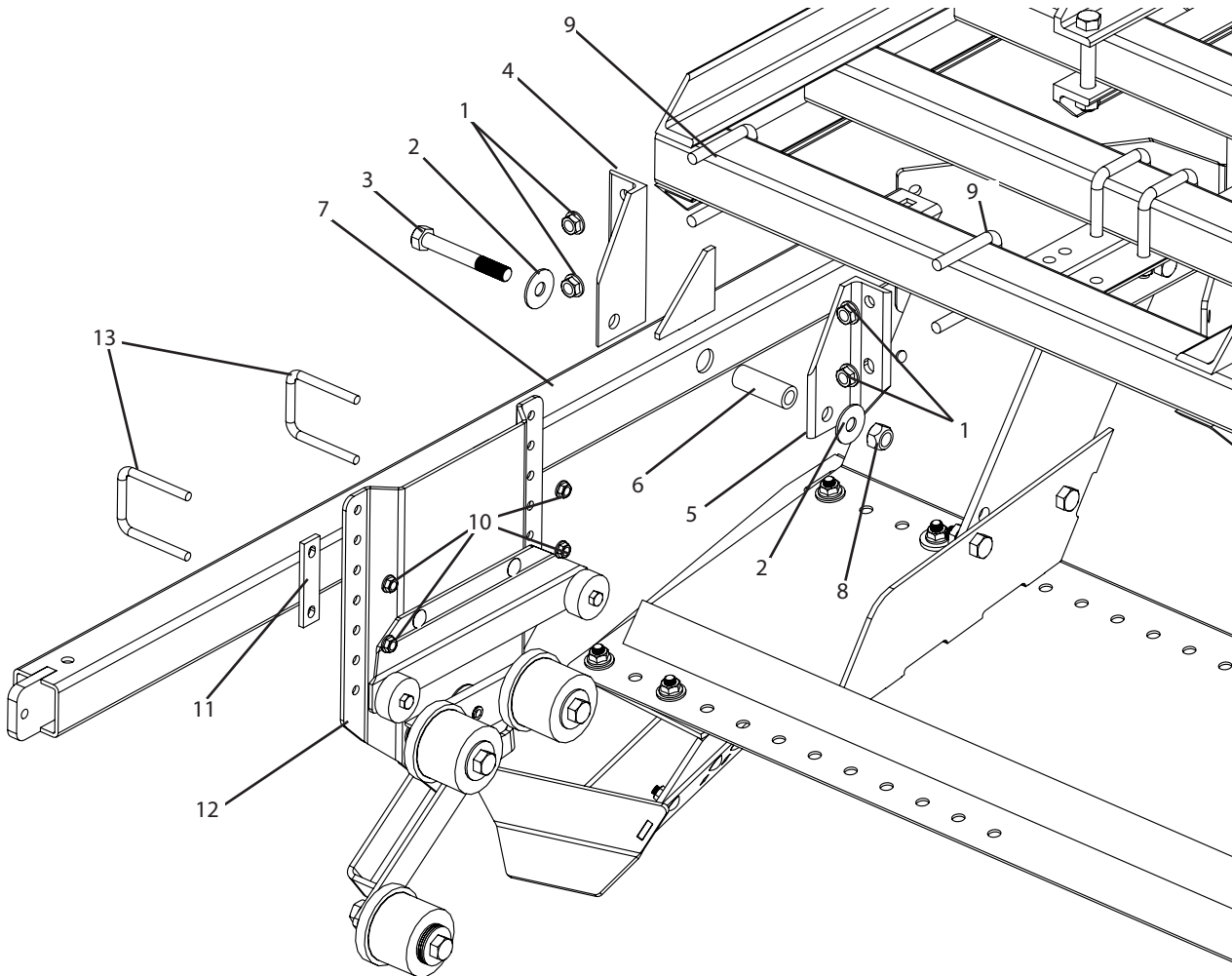
## Poly Liner for Bed Shaper (MLP4610)



Ref#	Qty.	Part #	Description
1	6	FN12	Nut, Flange 1/2-13
2	2	FW12	Washer, Flat 1/2" USS
3	6	H5C12*1	Bolt, Hex 1/2-13 x 1" Gr 5
4	1	RBL156	Plastic Mulch Layer, Poly Lining
5	1	RBL157	Plastic Mulch Layer, Poly Liner Clamp

# ML4600 Parts Breakdown

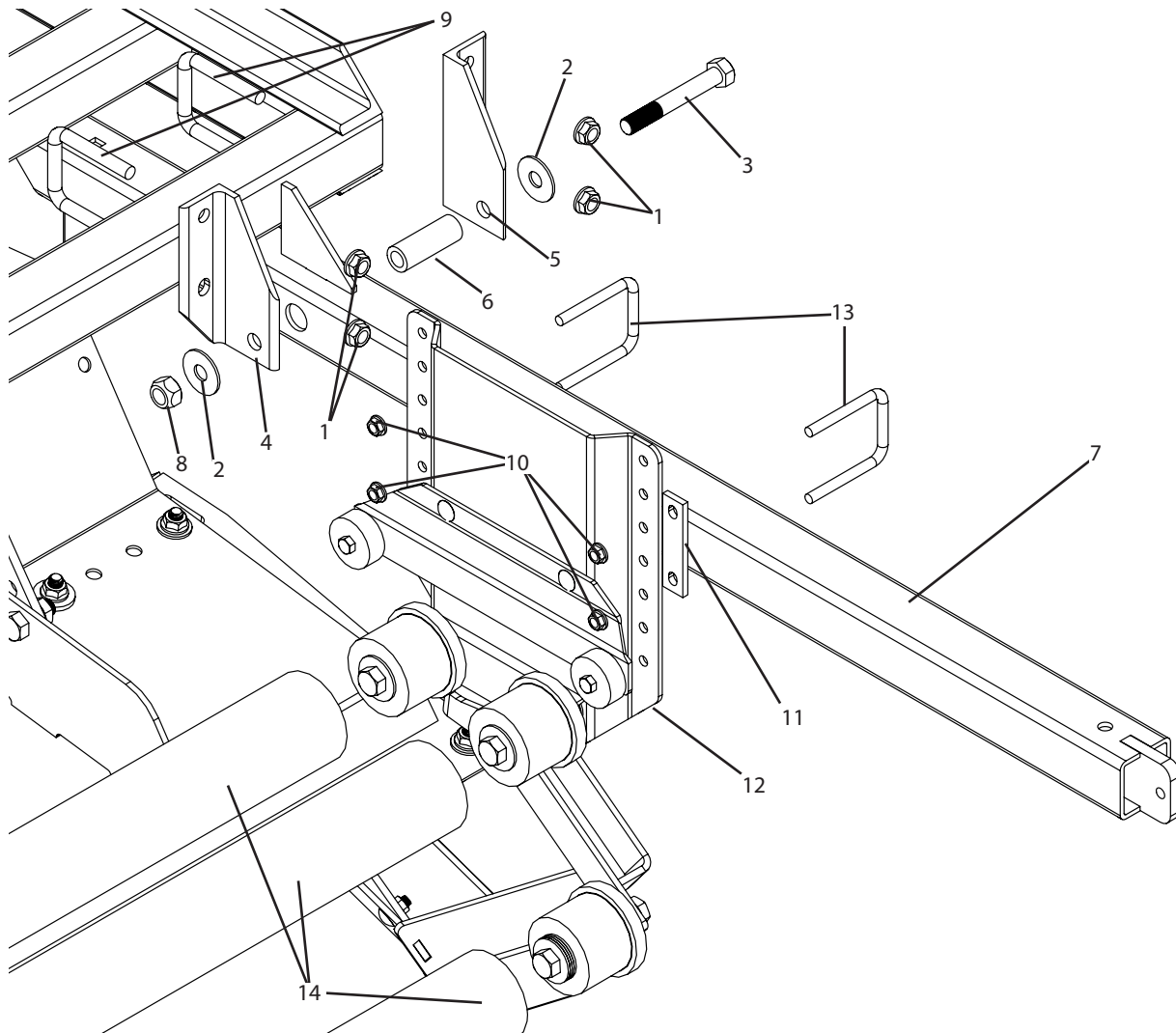
## Plastic Layer, Roller Carriage Toolbar, Side A



Ref#	Qty.	Part #	Description
1	4	FN12	Nut, Flange 1/2-13
2	2	FW58	Washer, Flat 5/8"
3	1	H5C58*412	Bolt, Hex 5/8-11 x 4-1/2" Gr 5
4	1	RBL120A	Plastic Layer, Hinge Bracket, Side A
5	1	RBL120B	Plastic Layer, Hinge Bracket, Side B
6	1	RBL121	Plastic Layer, Hinge Bushing
7	1	RBL122	Plastic Layer, Side Tool Bar
8	1	SNC58	Nut, Lock Steel 5/8-11
9	2	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc
10	4	FN38	Nut, Flange 3/8-16
11	2	RBL132	Plastic Layer, Spacer
12	1	RBL160A	Plastic Layer, Roll Carriage, Side A
13	2	UBSQ06X0208X0308	U-bolt, Square, 3/8-16 x 2 1/2" ID width x 3 1/2" ID length, Zinc

# ML4600 Parts Breakdown

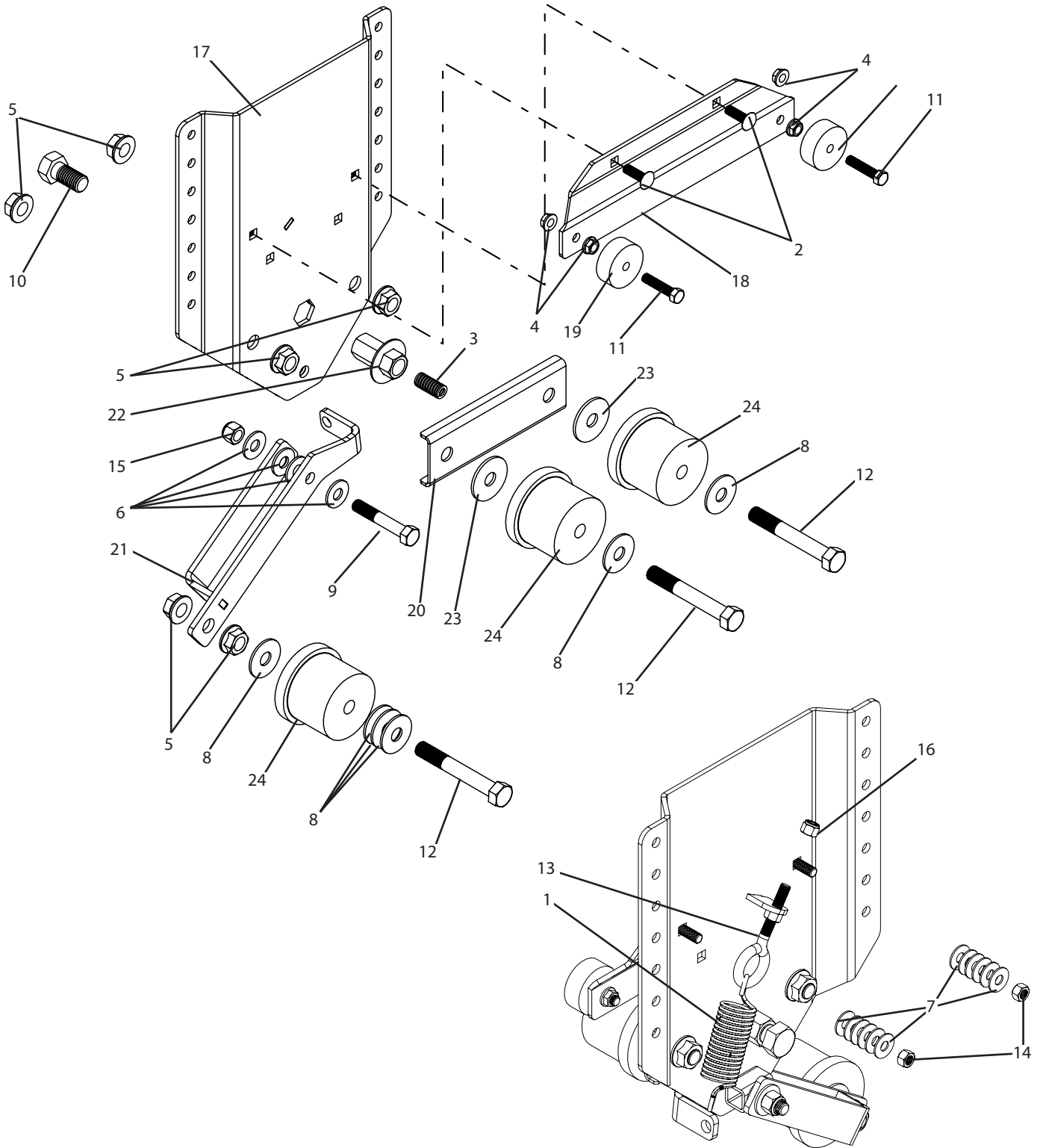
## Plastic Layer, Roller Carriage Toolbar, Side B



Ref#	Qty.	Part #	Description
1	4	FN12	Nut, Flange 1/2-13
2	2	FW58	Washer, Flat 5/8"
3	1	H5C58*412	Bolt, Hex 5/8-11 x 4-1/2" Gr 5
4	1	RBL120A	Plastic Layer, Hinge Bracket, Side A
5	1	RBL120B	Plastic Layer, Hinge Bracket, Side B
6	1	RBL121	Plastic Layer, Hinge Bushing
7	1	RBL122	Plastic Layer, Side Tool Bar
8	1	SNC58	Nut, Lock Steel 5/8-11
9	2	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc
10	4	FN38	Nut, Flange 3/8-16
11	2	RBL132	Plastic Layer, Spacer
12	1	RBL160B	Plastic Layer, Roll Carriage, Side B
13	2	UBSQ06X0208X0308	U-bolt, Square, 3/8-16 x 2 1/2" ID width x 3 1/2" ID length, Zinc
14	3	RBL141	Plastic Layer, Roller 60in

# ML4600 Parts Breakdown

## Roll Carriage, Side A (RBL160A)



# ML4600 Parts Breakdown

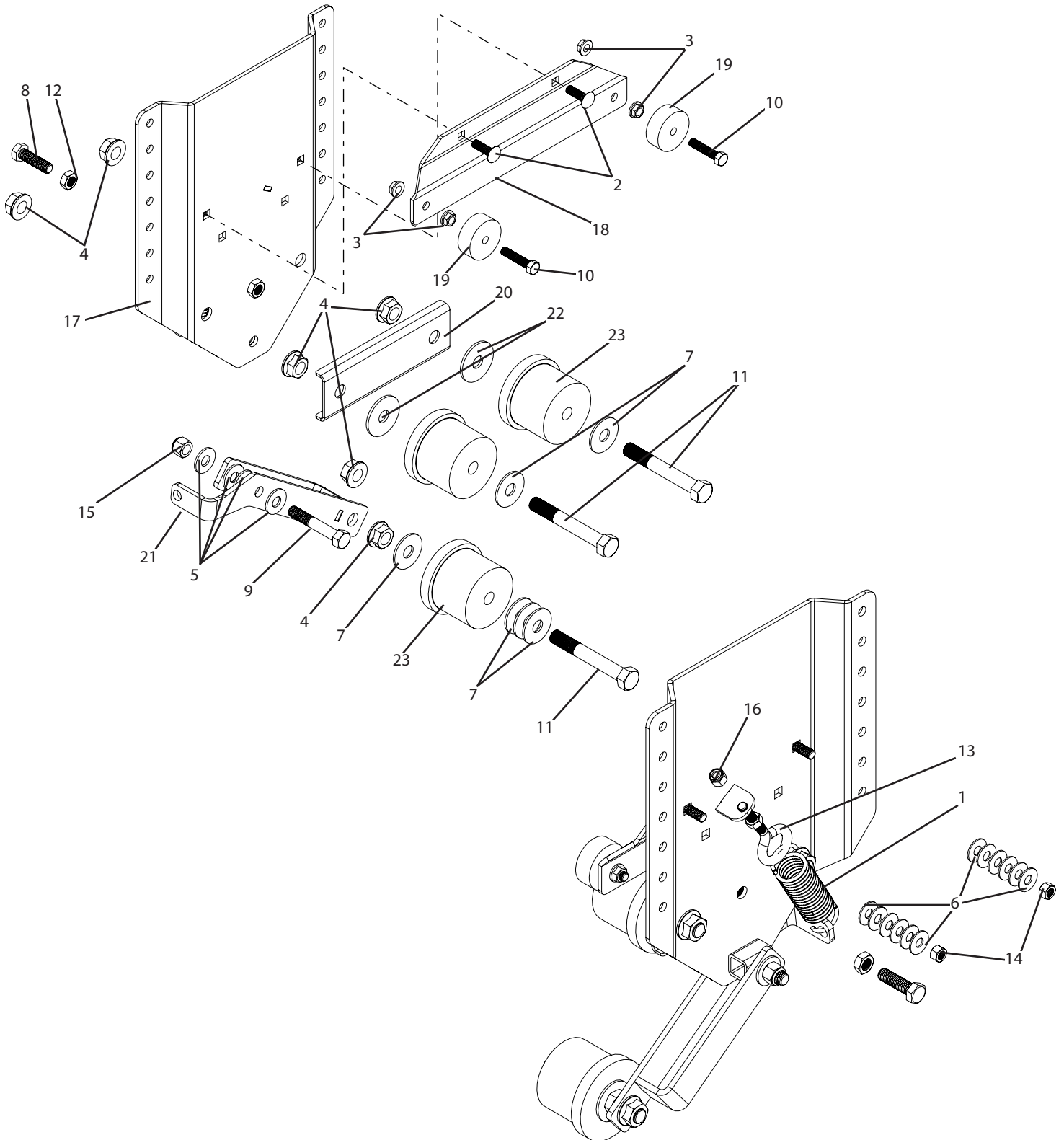
## Roll Carriage, Side A (RBL160A)

Ref #	Qty.	Part Number	Description
1	1	5780	Spring, Extension, 1.375 OD x .162 Wire x 5.5 length, Spring Steel, Zinc
2	2	CB38*114G5	Bolt, Carriage 3/8-16 x 1-1/4" Gr 5
3	1	D-1216	Die Spring, .625 OD x 1 1/2" long, Red, .1215 x .082 wire
4	4	FN38	Nut, Flange 3/8-16
5	6	FN58	Nut, Flange 5/8-11
6	4	FW12	Washer, Flat 1/2" USS
7	12	FW38	Washer, Flat 3/8"
8	7	FW58	Washer, Flat 5/8"
9	1	H5C12*3	Bolt, Hex 1/2-13 x 3" Gr 5
10	1	H5C34*112	Bolt, Hex 3/4-10 x 1-1/2" Gr 5
11	2	H5C38*134	Bolt, Hex 3/8-16 x 1-3/4" Gr 5
12	3	H5C58*412	Bolt, Hex 5/8-11 x 4-1/2" Gr 5
13	1	N221267	Bolt, Eye Closed 3/8-16 x 4" Zinc
14	2	NC38	Nut, Hex 3/8-16
15	1	NNC12	Nut, Lock Nylon 1/2-13
16	1	NNC38	Nut, Lock Nylon 3/8-16
17	1	RBL133A	Plastic Layer, Roller Bracket, Thumbscrew Side
18	1	RBL134	Plastic Layer, Roll Centering Plate
19	2	RBL135	Plastic Layer, Roll Centering Roller
20	1	RBL136	Plastic Layer, Brake Back Plate
21	1	RBL137A	Plastic Layer, Ground Roller Link, Side A
22	1	RBL138	Mulch Layer, Thumbscrew
23	2	RBL140	Plastic Layer, Brake Pad
24	3	RBL142	Plastic Layer, Roller End Bearing



# ML4600 Parts Breakdown

## Roll Carriage, Side B (RBL160B)



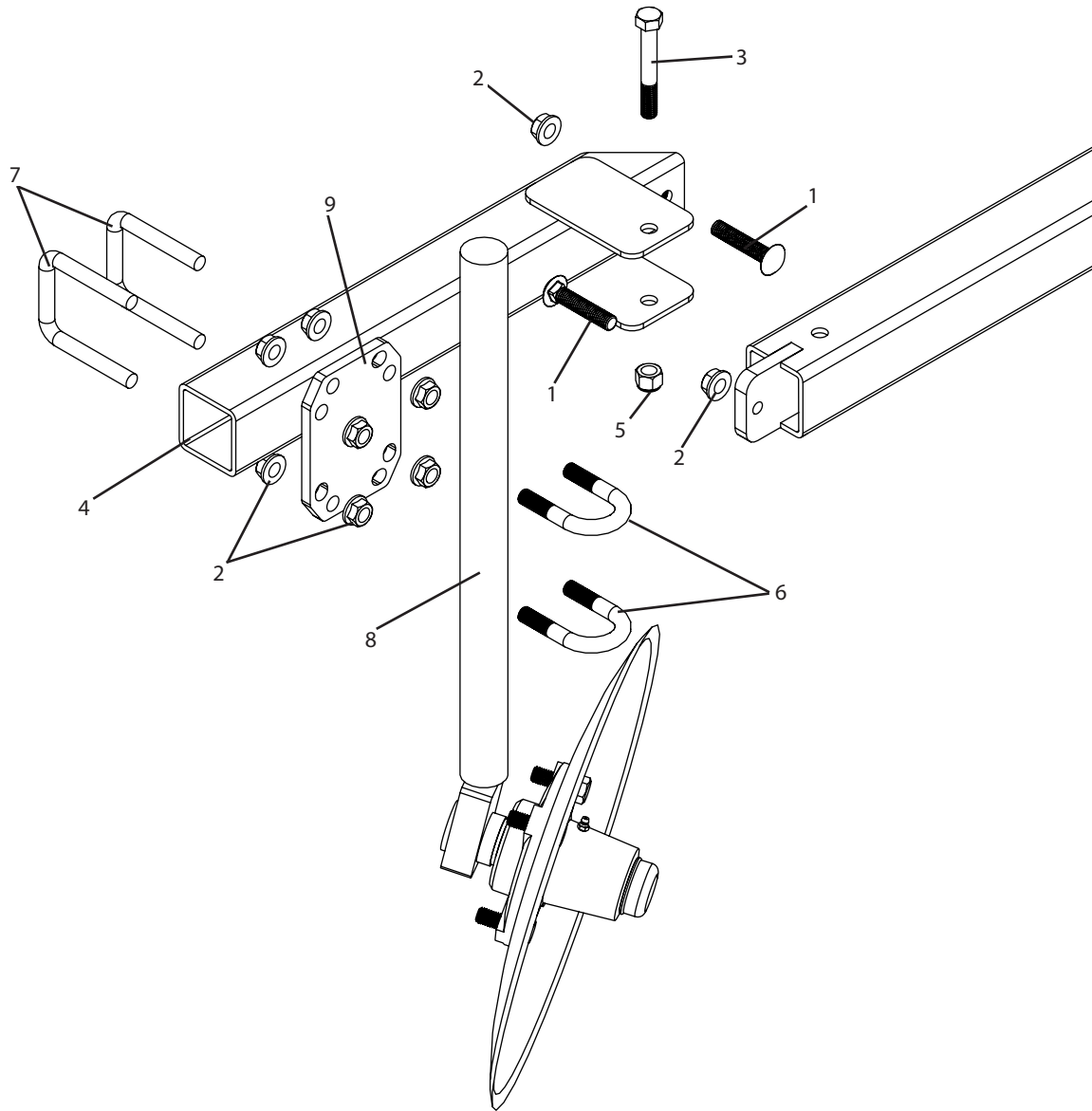
# ML4600 Parts Breakdown

## Roll Carriage, Side B (RBL160B)

Ref #	Qty.	Part Number	Description
1	1	5780	Spring, Extension, 1.375 OD x .162 Wire x 5.5 length, Spring Steel, Zinc
2	2	CB38*114G5	Bolt, Carriage 3/8-16 x 1-1/4" Gr 5
3	4	FN38	Nut, Flange 3/8-16
4	6	FN58	Nut, Flange 5/8-11
5	4	FW12	Washer, Flat 1/2" USS
6	12	FW38	Washer, Flat 3/8"
7	7	FW58	Washer, Flat 5/8"
8	1	H5C12*134	Bolt, Hex 1/2-13 x 1-3/4" Gr 5
9	1	H5C12*3	Bolt, Hex 1/2-13 x 3" Gr 5
10	2	H5C38*134	Bolt, Hex 3/8-16 x 1-3/4" Gr 5
11	3	H5C58*412	Bolt, Hex 5/8-11 x 4-1/2" Gr 5
12	1	JNC12	Nut, Jam 1/2-13
13	1	N221267	Bolt, Eye Closed 3/8-16 x 4" Zinc
14	2	NC38	Nut, Hex 3/8-16
15	1	NNC12	Nut, Lock Nylon 1/2-13
16	1	NNC38	Nut, Lock Nylon 3/8-16
17	1	RBL133B	Plastic Layer, Roller Bracket, Centering Screw Side
18	1	RBL134	Plastic Layer, Roll Centering Plate
19	2	RBL135	Plastic Layer, Roll Centering Roller
20	1	RBL136	Plastic Layer, Brake Back Plate
21	1	RBL137B	Plastic Layer, Ground Roller Link, Side B
22	2	RBL140	Plastic Layer, Brake Pad
23	3	RBL142	Plastic Layer, Roller End Bearing

# ML4600 Parts Breakdown

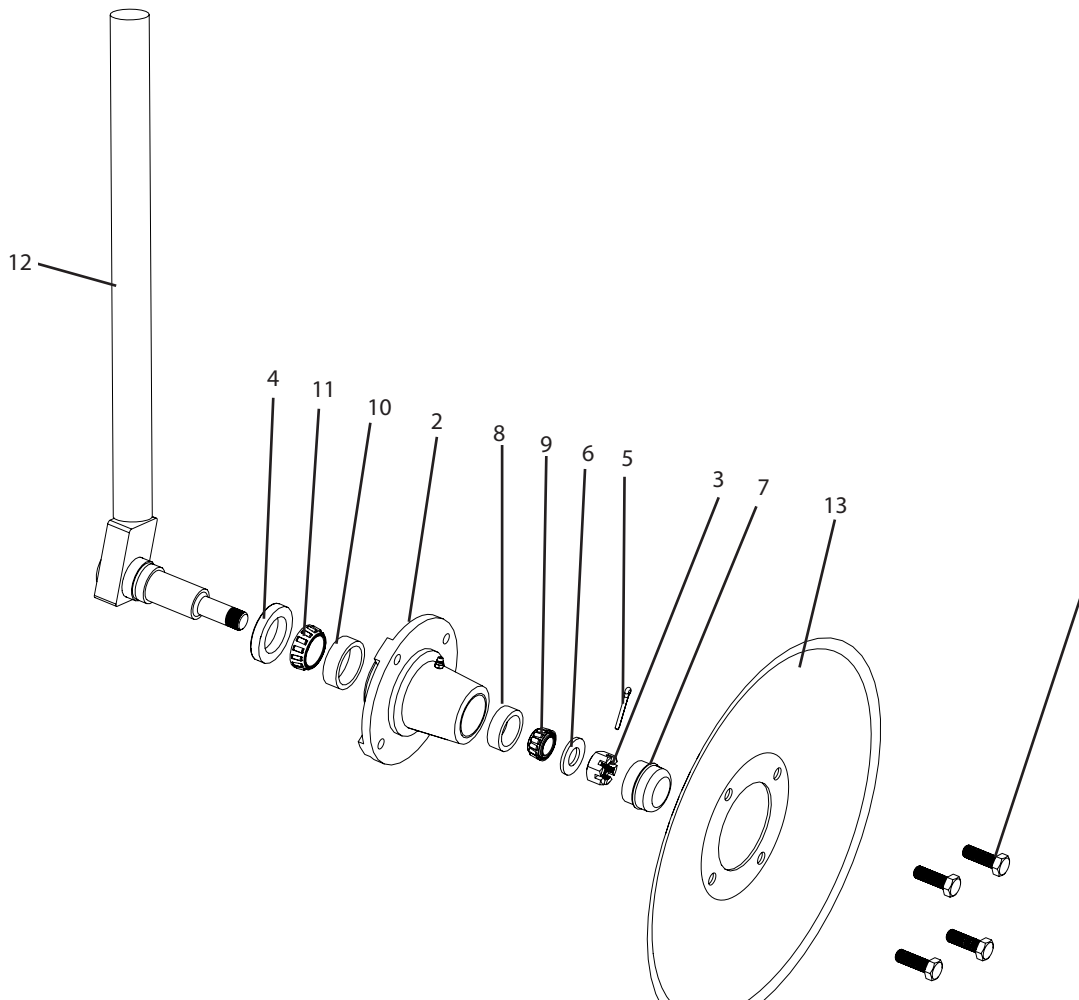
## Covering Disk Toolbar



Ref#	Qty.	Part #	Description
1	4	CB12*212G5	Bolt, Carriage 1/2-13 x 2-1/2" Gr 5
2	12	FN12	Nut, Flange 1/2-13
3	2	H5C12*4	Bolt, Hex 1/2-13 x 4" Gr 5
4	2	RBL126	Plastic Layer, Rear Toolbar Extension
5	2	NNC12	Nut, Lock Nylon 1/2-13
6	4	UBR08X0108X0212	U-bolt, 1/2-13 x 1 1/2" ID width x 2 3/4" length, Zinc
7	4	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc
8	2	RBL130	Plastic Layer, Covering Disk Assembly
9	2	RBL143	Plastic Layer, Covering Disk and Press Wheel Shank Clamp

# ML4600 Parts Breakdown

## Covering Disks (RBL130)

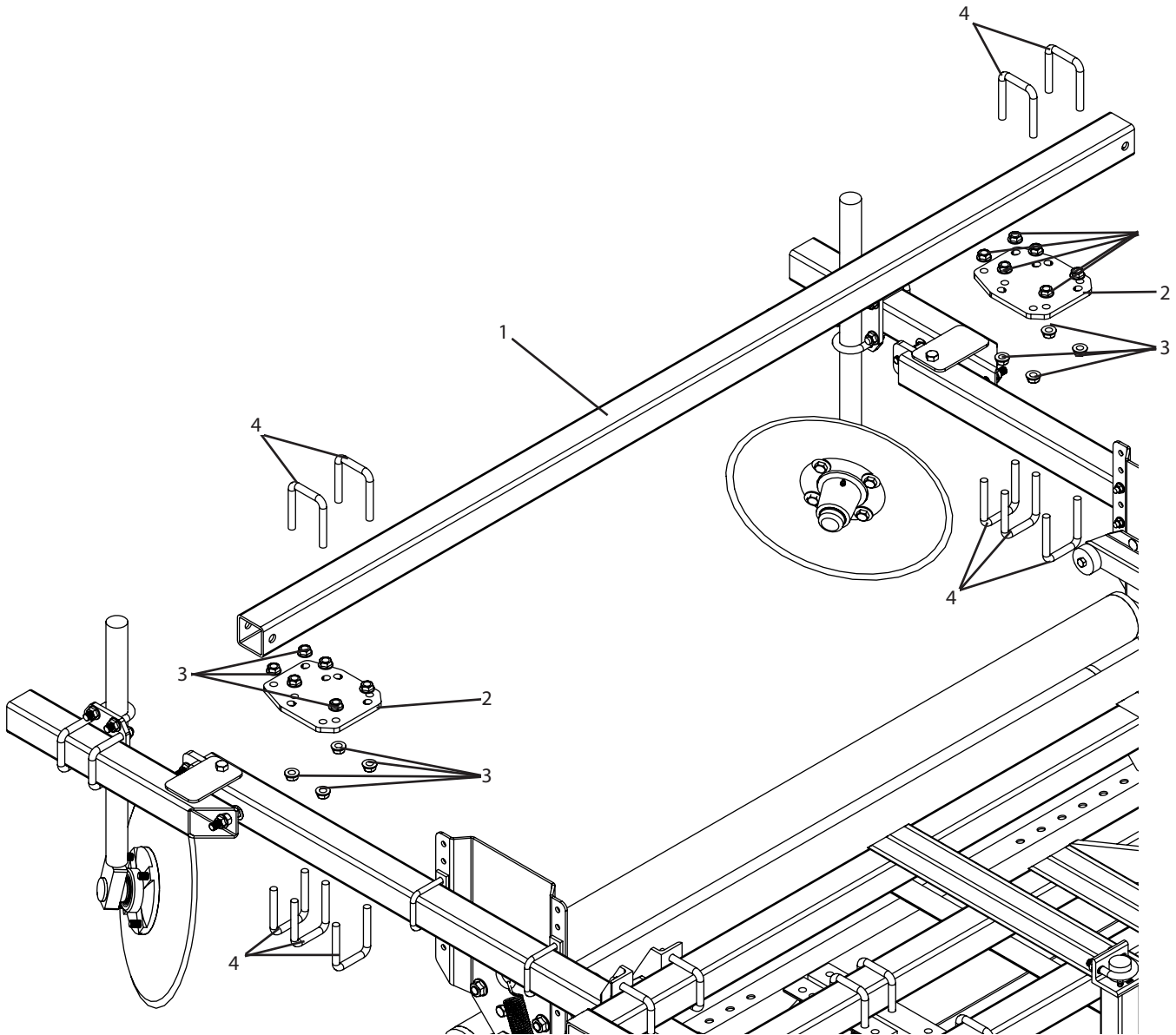


Ref #	Qty.	Part Number	Description
1	4	H5F12*112	* Bolt, Hex 1/2-20 x 1-1/2" Gr 5
2	1	RBL162	Hub Assembly, 4 Bolt On 5in Circle (3.625 Hub Pilot)
3	1	CNF34	* Slotted Nut, 3/4"-16, Zinc
4	1	CR14975	* Seal
5	1	CT532X114	* Cotter Pin, 5/32" x 1 1/4"
6	1	SW34	* Washer, Flat 3/4" SAE
7	1	RBL163	* Hub Cap
8	1	LM11910	* Bearing Cup, Outer
9	1	LM11949	* Outer Cone Bearing, 1500 lbs Hub
10	1	LM67010	* Bearing Cup, Inner
11	1	LM67048	* Inner Cone Bearing, 1500 lbs Hub
12	1	RBL144	Bed Shaper, Rotating Inner Shank
13	1	RBL154	Disc Blade, Smooth, Concavity, 16in, (4) 1/2" bolts, 5in dia, 3 11/16" pilot

\* Components of RBL162.

# ML4600 Parts Breakdown

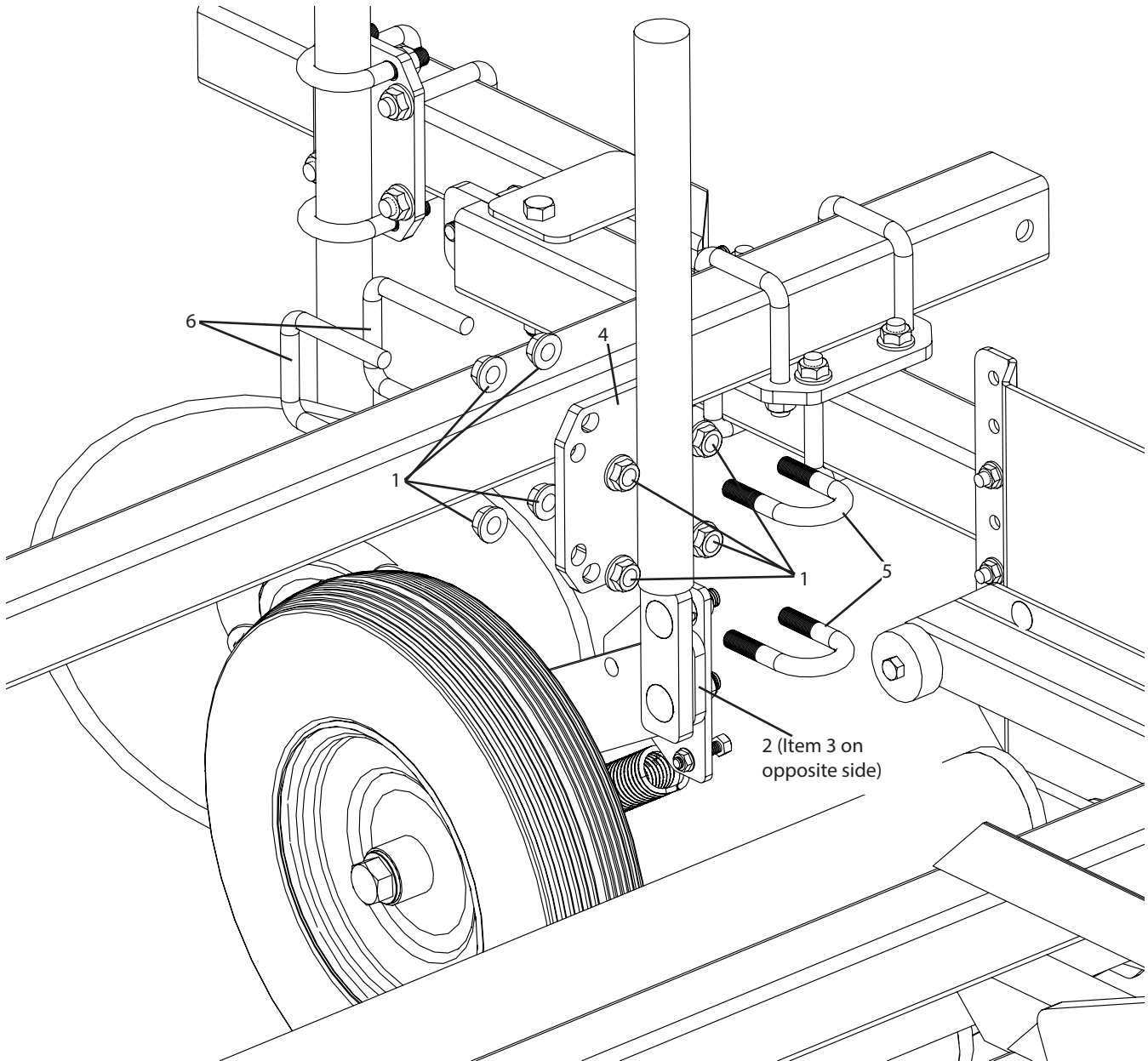
## Rear Toolbar



Ref#	Qty.	Part #	Description
1	1	RBL128	Plastic Layer, Toolbar 84in
2	2	RBL127	Plastic Layer, Toolbar Clamp Plate
3	20	FN12	Nut, Flange 1/2-13
4	10	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc

# ML4600 Parts Breakdown

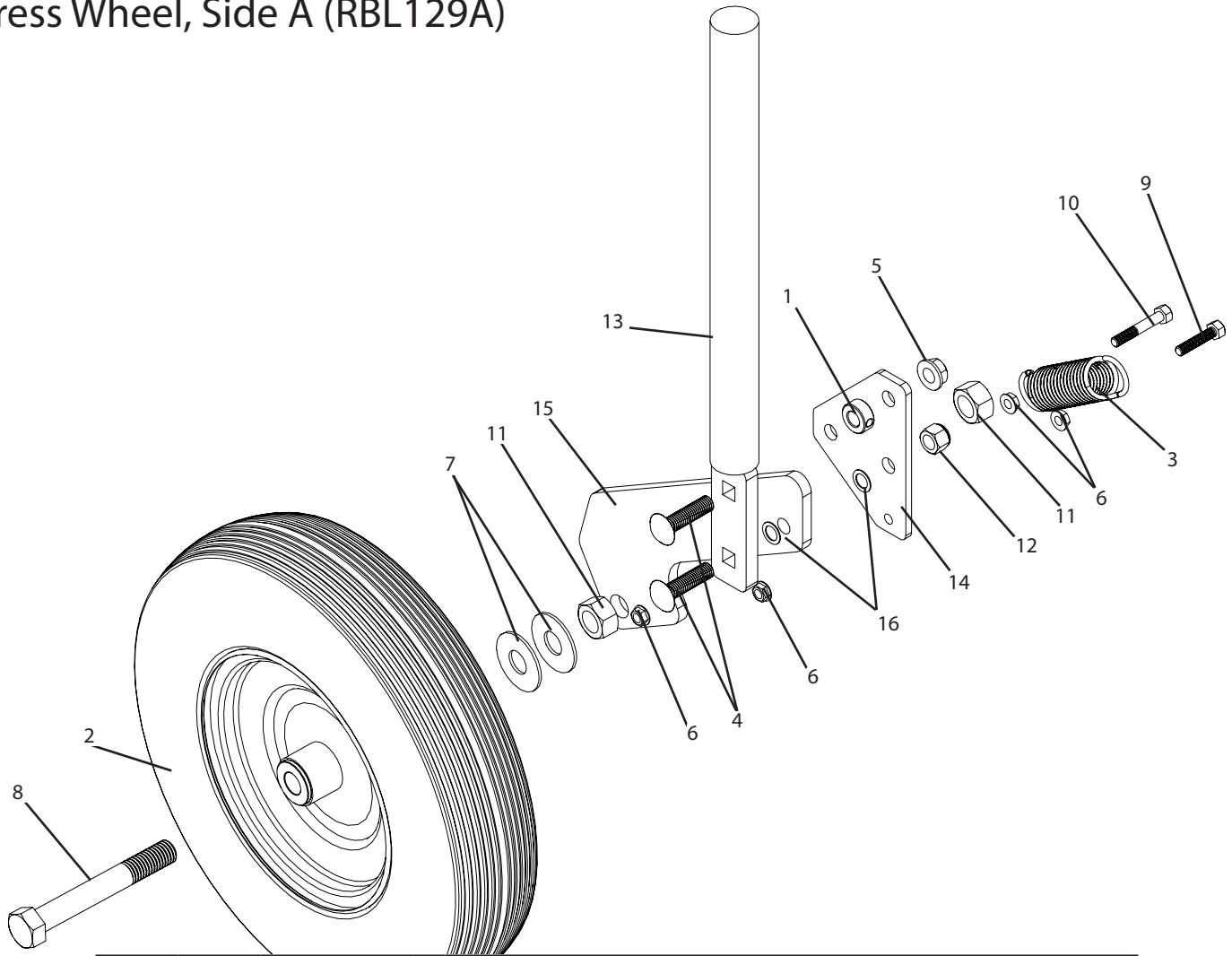
## Press Wheel



Ref#	Qty.	Part #	Description
1	16	FN12	Nut, Flange 1/2-13
2	1	RBL129A	Plastic Layer, Press Wheel Assembly, Side A
3	1	RBL129B	Plastic Layer, Press Wheel Assembly, Side B
4	2	RBL143	Plastic Layer, Covering Disk and Press Wheel Shank Clamp
5	4	UBR08X0108X0212	U-bolt, 1/2-13 x 1 1/2" ID width x 2 3/4" length, Zinc
6	4	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc

# ML4600 Parts Breakdown

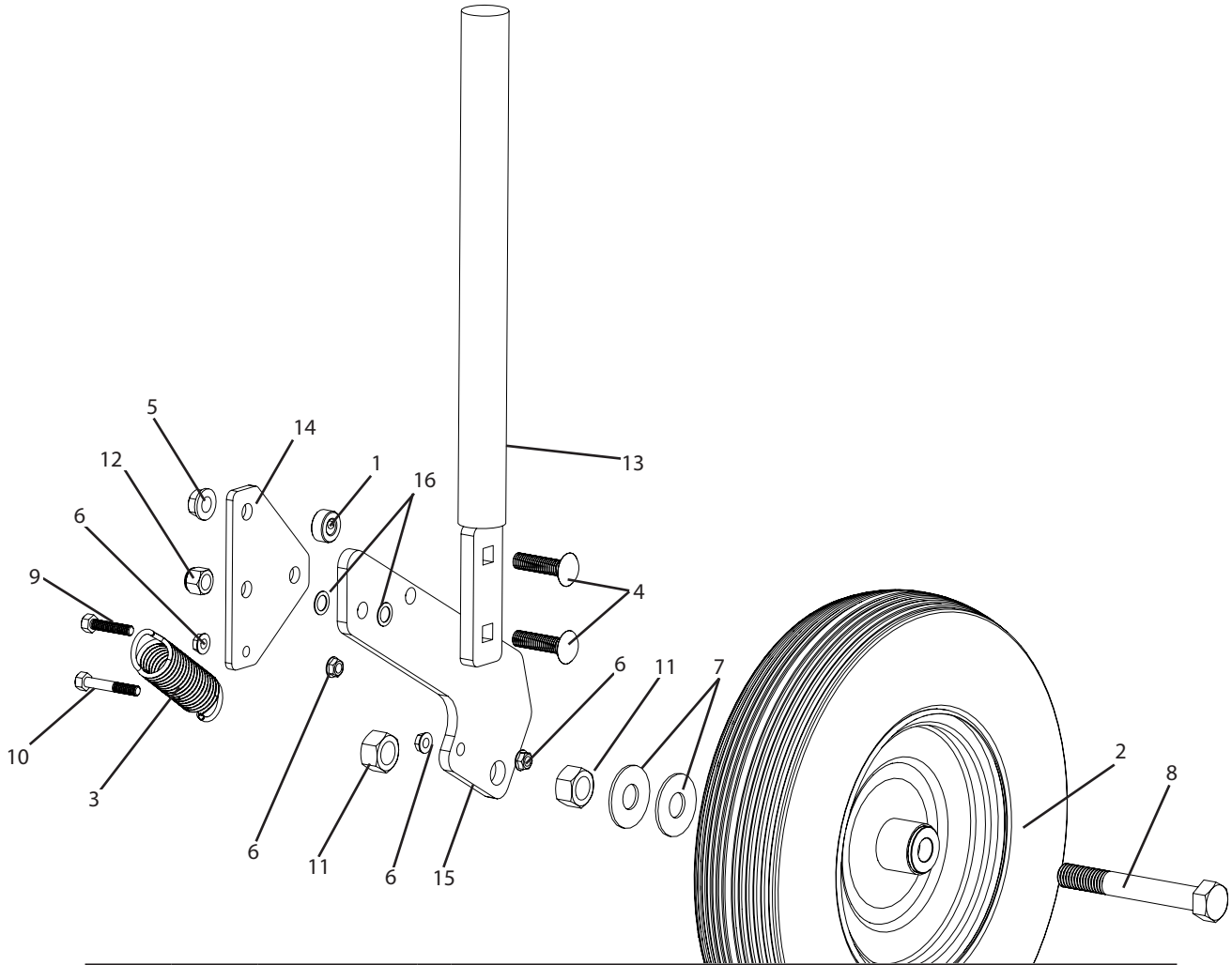
## Press Wheel, Side A (RBL129A)



Ref #	Qty.	Part Number	Description
1	1	0500P	Shaft Collar, 1/2"
2	1	409DC3-34BB	Wheel, 4-ply, 480x400-8, 3/4"BB, Ribbed, Tubeless
3	1	5780	Spring, Extension, 1.375 OD x .162 Wire x 5.5 length, Spring Steel, Zinc
4	2	CB12*2G5	Bolt, Carriage 1/2-13 x 2" Gr 5
5	1	FN12	Nut, Flange 1/2-13
6	4	FN516	Nut, Flange 5/16-18
7	2	FW34	Washer, Flat 3/4"
8	1	H5C34*512	Bolt, Hex 3/4-10 x 5-1/2" Gr 5
9	1	H5C516*112	Bolt, Hex 5/16-18 x 1-1/2" Gr 5
10	1	H5C516*2	Bolt, Hex 5/16-18 x 2" Gr 5
11	2	NC34	Nut, Hex 3/4-10
12	1	NNC12	Nut, Lock Nylon 1/2-13
13	1	RBL146	Plastic Layer, Press Wheel Shank
14	1	RBL147	Plastic Layer, Pivot Support
15	1	RBL149	Plastic Layer, Press Wheel Spindle Mount
16	2	SW12030	Shim 1/2" ID 3/4" OD .031" Thick

# ML4600 Parts Breakdown

## Press Wheel, Side B (RBL129B)

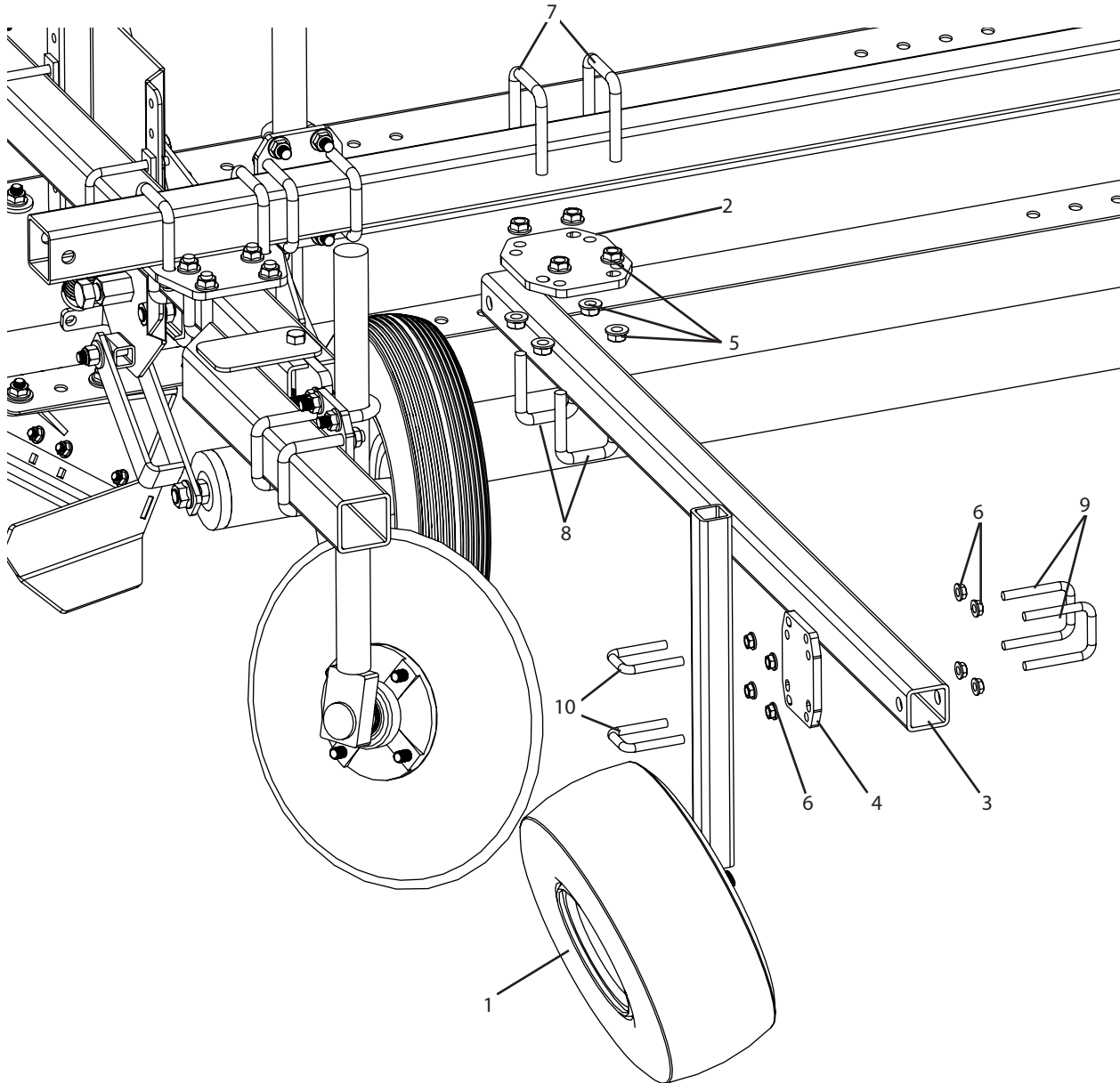


Ref #	Qty.	Part Number	Description
1	1	0500P	Shaft Collar, 1/2"
2	1	409DC3-34BB	Wheel, 4-ply, 480x400-8, 3/4"BB, Ribbed, Tubeless
3	1	5780	Spring, Extension, 1.375 OD x .162 Wire x 5.5 length, Spring Steel, Zinc
4	2	CB12*2G5	Bolt, Carriage 1/2-13 x 2" Gr 5
5	1	FN12	Nut, Flange 1/2-13
6	4	FN516	Nut, Flange 5/16-18
7	2	FW34	Washer, Flat 3/4"
8	1	H5C34*512	Bolt, Hex 3/4-10 x 5-1/2" Gr 5
9	1	H5C516*112	Bolt, Hex 5/16-18 x 1-1/2" Gr 5
10	1	H5C516*2	Bolt, Hex 5/16-18 x 2" Gr 5
11	2	NC34	Nut, Hex 3/4-10
12	1	NNC12	Nut, Lock Nylon 1/2-13
13	1	RBL146	Plastic Layer, Press Wheel Shank
14	1	RBL147	Plastic Layer, Pivot Support
15	1	RBL149	Plastic Layer, Press Wheel Spindle Mount
16	2	SW12030	Shim 1/2" ID 3/4" OD .031" Thick



# ML4600 Parts Breakdown

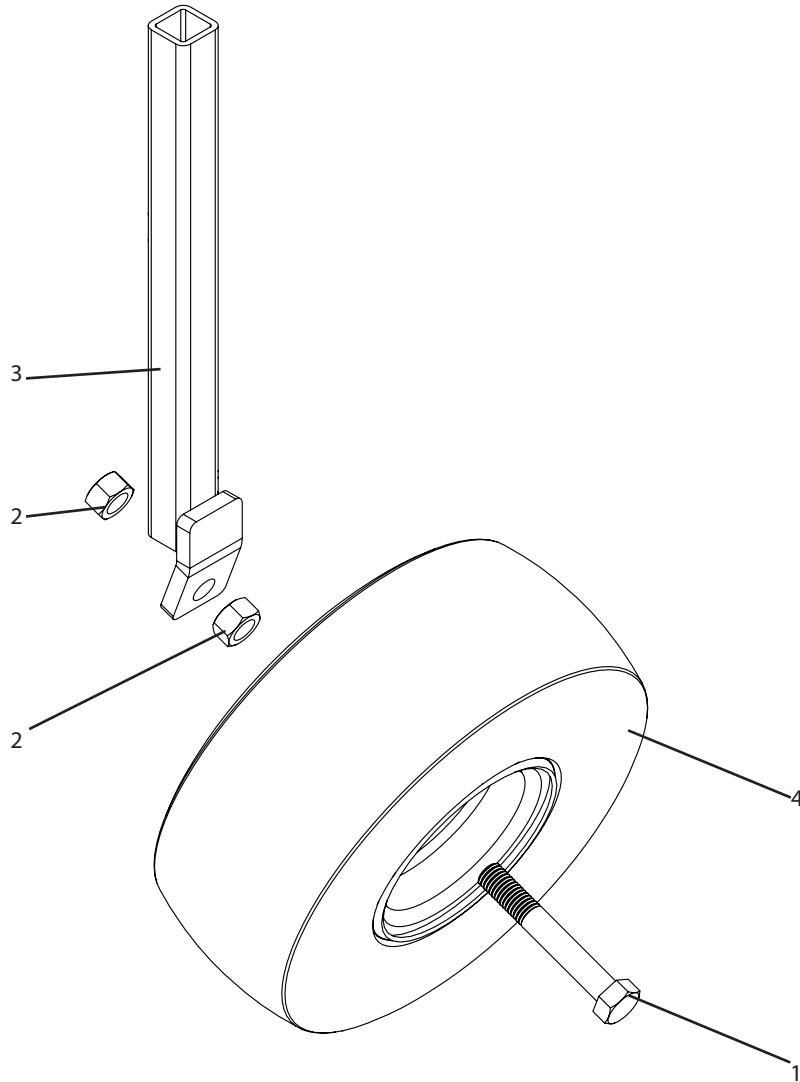
## Gauge Wheels



Ref#	Qty.	Part #	Description
1	2	RBL131	Plastic Layer, Gauge Wheel Assembly
2	2	RBL150	Plastic Layer, Toolbar Clamp Plate
3	2	RBL151	Plastic Layer, Rear Gauge Wheel Toolbar
4	2	RBL152	Plastic Layer, Rear Gauge Wheel Clamp
5	8	FN12	Nut, Flange 1/2-13
6	8	FN38	Nut, Flange 3/8-16
7	4	UBSQ08X0208X0308	U-bolt, Square, 1/2-13 x 2 1/2" ID width x 3 1/2" ID length, zinc
8	4	UBSQ08X02X03	U-bolt, Square, 1/2-13 x 2" ID width x 3" ID length, zinc
9	4	UBSQ06X02X03	U-bolt, Square, 3/8-16 x 2" ID width x 3" ID length, zinc
10	4	UBSQ06X0108X0208	U-bolt, Square, 3/8-16 x 1 1/2" ID width x 2 1/2" ID length, zinc

# ML4600 Parts Breakdown

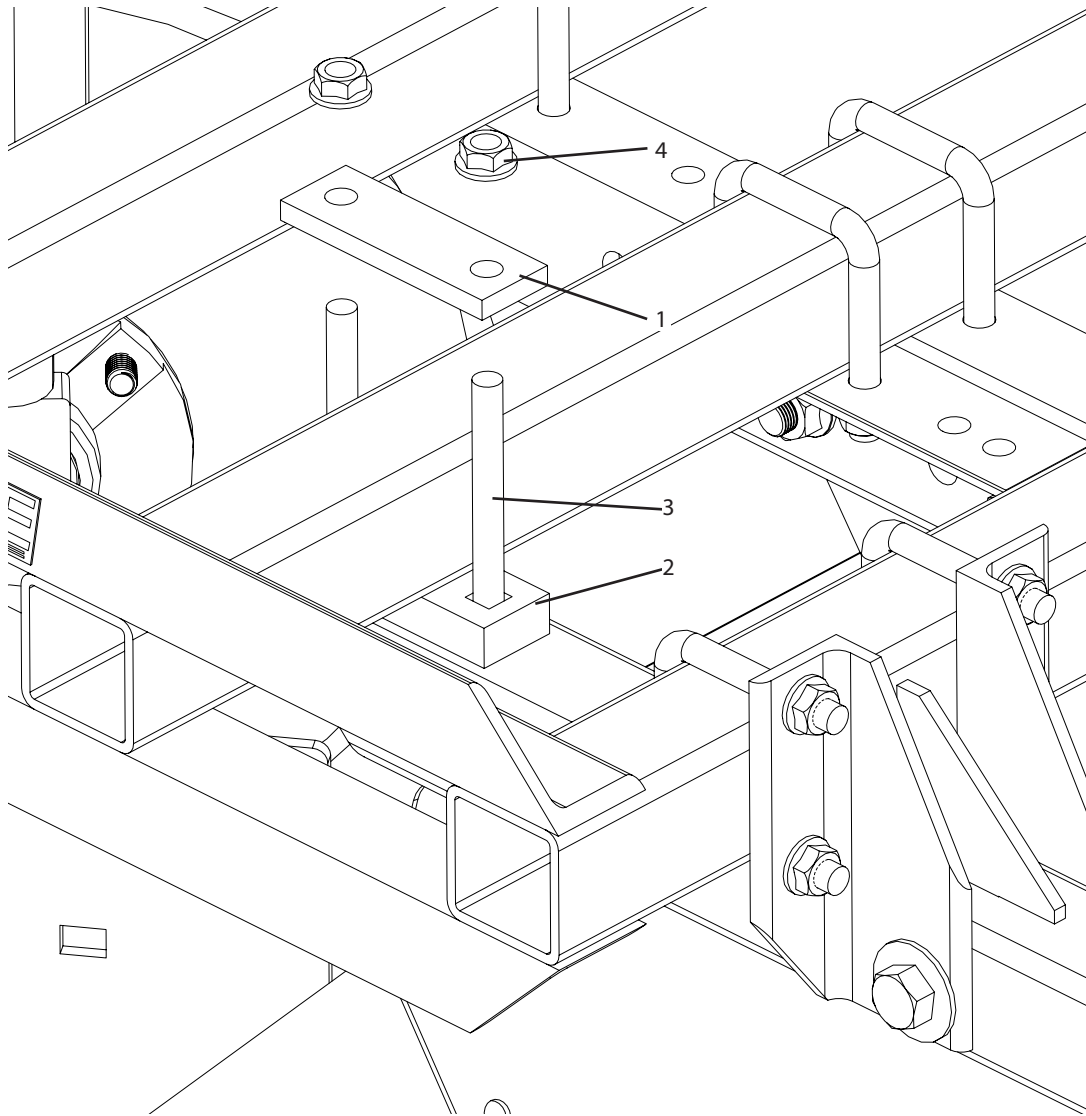
## Gauge Wheel (RBL131)



Ref #	Qty.	Part Number	Description
1	1	H5C34*5	Bolt, Hex 3/4-10 x 5" Gr 5
2	2	NC34	Nut, Hex 3/4-10
3	1	RBL153	Plastic Layer, Rear Guage Wheel Post
4	1	RBL155	Wheel, 2-ply, 15X600-6, 3/4"BB, Turf Rider, Tubeless

# ML4600 Parts Breakdown

## Plastic Layer Clamps



Ref#	Qty.	Part #	Description
1	2	RBL124	Plastic Layer, Clamp Bar
2	2	RBL125	Plastic Layer, Spacer Bar
3	4	CB12*5G5	Bolt, Carriage 1/2-13 x 5" Gr 5
4	4	FN12	Nut, Flange 1/2-13